

Addressing Food Insecurity: Expanding Access Through Community Gardens

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Growing food either at home gardens or at community gardens can increase the intake of fresh fruits and vegetables. Gardening has positive impacts not only on gardeners, but also on their families and neighborhoods. Community gardens bring different people together, increase social connections and create a united community.

Types of community gardens

- Plot gardens: A garden divided into plots with each plot managed individually.
- Cooperative gardens: One large garden managed by a group of individuals.
- Youth gardens: Gardens, such as school gardens, that serve youth (often including education).
- Entrepreneurial market gardens: Gardens where produce is grown to sell for funding, profit or educational purposes.
- Therapeutic gardens: Gardens used to improve the wellbeing of their caregivers (e.g., hospital gardens)

Resource: Lucy Bradley. (2019), How to Create a Community Garden. North Carolina Cooperative Extension

Why Work with Community Gardens

Almost one in 10 Americans experience food insecurity, meaning that they don't have access to enough food sometime during the year. People with food insecurity are also more likely to have chronic conditions, such as type 2 diabetes and obesity.

Often community resources for those in need exist to assemble patchwork meals and may not offer the variety of nutritious produce recommended to promote health. Food drives and donations to food pantries generally encourage donations of shelf-stable products such as dry and canned goods (Feeding America, 2020). While these products play an important role in addressing food insecurity, they may not address the full gamut of human nutrition needs. Furthermore, people with food insecurity may struggle with access to fresh fruits and vegetables both in terms of proximity and affordability (Mayer et al., 2014).

Gardening is an effective and promising method to address food insecurity by increasing access to nutritious food. In addition, gardening increases physical activity, which is very important in prevention and management of chronic conditions.

Benefits of Community Gardens

There are many documented benefits to community gardens and the role they play in improving access to fresh produce, boosting nutrition and health, and increasing social capital.

Increased access to fresh produce: Community gardens provide participants with fresh produce options that may not be easily accessible or that are perceived to be unaffordable at local stores. Community gardens, including site-specific gardens, have become increasingly popular and can be found near city centers, at schools, senior centers, public housing campuses and other areas. These gardens may supply their produce harvest to the site and volunteers supporting the garden or the produce may be disseminated through local food pantries, churches or other distribution sites with a goal of serving vulnerable populations.

Improved nutrition and health: Adult participation in community gardens is associated with greater consumption of fruit and vegetables in both rural and urban settings (Alaimo et al., 2008; Barnidge et al., 2013), and similar findings are found with youth and school gardens (Parmer et al., 2009). Moreover, regular physical activity including the moderate activity associated with gardening can help prevent chronic diseases such as type 2 diabetes, heart disease and many types of cancer (CDC, 2020).

Social Capital: Community gardens can have an impact on social capital through relationship building, volunteerism and community outreach. Gardens can bring people together who may not normally socialize and these relationships have the potential to lead to further community organizing and empowerment (Draper & Freedman, 2010).

How Extension Can Help

Cooperative Extension is particularly well placed to help organize and promote community garden work. When working with community gardens, Extension staff have the potential to contribute:

- Agricultural expertise.
- Nutrition expertise.
- Community-building deftness.
- Connection to relevant community partners (i.e., Master Gardeners).

The Importance of Community Partnerships

To make sure a community garden is adopted and sustained by the community it is meant to serve, it is important to involve a variety of partners. Different community partners may have different resources to contribute, including volunteers, funding, equipment and expertise. If there is a Master Gardener program in your county, consider making them your first call. They can help guide you through the process and suggest other partners to bring to the table. Some partners to consider include faith-based organizations, community and senior centers, community service organizations and clubs, food pantries, health departments, housing developments, neighborhood associations, parks and recreation clubs, local businesses, retirement communities and schools.

Getting Started

Assess Needs. Any successful project will meet a real need in your community. A needs assessment is an essential step in deciding if a community garden is a viable project that will address the issue of food insecurity in your county. An effective needs assessment will:

- Identify what gardening initiatives already exist in the community.
- Define the problem(s) the garden is meant to address.
- Identify viable healthy land for the garden.
- Assess the community's readiness for a garden project.

Without conducting a needs assessment, a great project can struggle to gain foothold. A needs assessment does not need to be a formal research study but can include searching online for other gardens, talking to key community stakeholders about projects and people related to gardening in the community, and researching food insecurity statistics in your county. Specialists in the UT Extension state office can be a helpful resource for conducting a needs assessment as well.

Planning Considerations

- *Start a Garden Group:* An important first step to planning a community garden is to gather a group of at least three to five committed and interested individuals who are dedicated to the effort. No one person can manage and maintain a community garden alone. Ideally at least one person in the garden planning group is a staff member at the garden site that can incorporate community garden work into their job duties. This group will develop a vision for your garden, design the type of garden to be planted, determine the resources needed, design a budget, help coordinate gardening projects and more.

- *Determine the Type of Garden and Potential Locations:* The location of the garden will depend on the type of garden that is planted. Will it be an inground garden? This will require land and soil testing. Will you use raised beds? If so, who will put the beds together and supply the materials? Once your garden group has decided the type of garden that fits the needs of the community, select an appropriate location that is near the participants the garden is intended to serve. Make sure to consider sites with a water source nearby.
- *Volunteer Coordination and Engagement:* Often, keeping volunteers engaged is the most difficult part of managing a community garden. Some tips for keeping volunteers engaged:
 - Develop a volunteer agreement and outline duties and time commitments; have volunteers sign the agreement.
 - Schedule volunteers for certain weeks/days, and send out schedule reminders regularly.
 - Schedule fun and social garden workdays for volunteers during busy months.
 - Acknowledge and regularly recognize dedicated volunteers.
- *Develop a Produce Distribution Plan:* Your produce distribution plan will be based around the goals that the garden group established. This plan should outline who the produce will be offered to and how it will be distributed. For instance, if the garden will donate all produce to a local food pantry, the plan should name the food pantry and main contact who is responsible for delivering or picking up produce regularly and how the produce will be used by the pantry.
- *Special Considerations for School Gardens:* Youth gardens can provide opportunities for nutrition education and skills development, however, before getting started, consider the following:
 - Is the school administration supportive of a garden?
 - Is there adequate space, water access, funding and staff to support the garden?
 - How much time will students be able to commit to the garden?

School garden leadership may also want to work to coordinate planting and harvesting by semester schedules so that students have the opportunity to work in the garden from start to finish. Teachers can also work together to develop garden learning experiences that match up with what they are teaching in the classroom (Duncan, Painter & Bumgarner, 2020).

Sustainability

A community garden needs consistent care and attention to thrive; therefore, planning a garden should include considerations of how the garden will operate into the future. A location and a group of committed volunteers can ensure that, even when people move or lose interest, new volunteers will continue to support the program.

Funding. A key consideration in sustainability is funding. Leveraging diverse sources of funding for the community garden ensures that the loss of one source of support does not endanger the existence of the project. If the garden is located in a qualifying census tract or serves SNAP-eligible audiences, SNAP-Ed: TNCEP is a potential source for small garden tools, seeds and soil. Some community gardens have succeeded by partnering with the TNCEP or EFNEP programs. For example, participants in the nutrition education programs can work in the garden and are then able, literally, to reap what they sow. A steady stream of direct education participants provides a source of potential garden volunteers and pairs access with education in addressing food insecurity.

Other sources of funding are necessary to start and sustain the garden and can include community foundations, faith-based groups and individual donors. Many times, making community contacts will lead to potential sources of funding. Applications vary by funding type but are generally less extensive than federal grants. In this way, bringing together a group of interested individuals will not only help sustain the physical requirements of the garden project, but the financial resourcing necessary as well.

Evaluating and Reporting

Evaluation of the gardens can be done by a variety of outcomes at three levels: short-term, intermediate and long-term. Below are some example outcomes for each level: (Diaz et al., 2017)

- Short-term outcomes (Knowledge, attitudes, skills and aspiration):
 - Increased appreciation and knowledge for local food systems (e.g., where food comes from).
 - Increased connection to community (awareness, appreciation and respect).
 - Gardeners understand and appreciate the benefits of growing their own food.
 - Gardeners increase their ability to teach others and share what they learned.
- Intermediate outcomes (Behavior change or adoption of best practices):
 - Gardeners are able to supplement their diets with the food that they grow.
 - Increase in healthy food consumption (e.g., fruits and vegetables).
 - Garden and community members spend more time outdoors.
 - Gardeners share knowledge and experiences with each other.
 - Community gardens develop organizational management practices and policies (rules and regulations, garden workday plans, conflict resolution processes, etc.).
- Long-term outcomes (Social, economic and environmental conditions):
 - Gardens serve as places for inclusive interactions and engagement (diversity of generations, ethnicity, races, etc.).
 - Increased accessibility to healthy, fresh foods.
 - Gardens improve mental health among their participants.
 - Gardens are sustained over multiple seasons.
 - Gardens provide educational opportunities to lifelong learners.

Gibson County Community Garden Connects Partners to Address Food Insecurity

While teaching TNCEP (Tennessee Nutrition and Consumer Education Program) nutrition classes to limited-resource families, LaQuita Clark, UT Extension Gibson County program assistant, noticed many of her participants needed not just improved access to healthy foods but access to healthy, fresh produce. In response, she worked with UT Extension agent Barbara Berry to start a small food pantry and community garden to help supplement the meals of her class participants. LaQuita's first call was her county Master Gardener who helped her and her garden group start the planning process.

Right from the beginning LaQuita and Barbara were aware that they would need plenty of community partners, resources and volunteers to make this garden a success. They recruited from local churches, community programs, businesses, city groups and TNCEP classes. To keep everyone engaged, they created a calendar to schedule volunteers and sent reminders. They also made sure to recognize and acknowledge their partners every step along the way.

TNCEP class participants report working in the garden and using the fresh produce the garden provides in their cooking at home. Participants are grateful for the garden as it provides them with a way to connect the lessons they learn in class to their daily living and offers them access to free, fresh produce that they may not otherwise have.

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